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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/669,106

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EXAMINER

ILAN, RUTH

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/669,106	Applicant(s) RAMSEY, JOHN E.	
	Examiner Ruth Ilan	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is confusing for two primary reasons. First of all, the Applicant has attempted to generically claim a series of embodiments using a Markush type claim. A Markush-type claim recites alternatives in a format such as "selected from the group consisting of A, B and C." See Ex parte Markush, 1925 C.D. 126 (Comm'r Pat. 1925). The members of the Markush group (A, B, and C in the example above) ordinarily must belong to a recognized physical or chemical class or to an art-recognized class. It is noted that when the Markush group occurs in a claim reciting a process or a combination (not a single compound), it is sufficient if the members of the group are disclosed in the specification to possess at least one property in common which is mainly responsible for their function in the claimed relationship, and it is clear from their very nature or from the prior art that all of them possess this property. In the instant case, in claim 1, lines 11 and 12, the first Markush group of alternatives is "*at least one structure selected from the group consisting of a bracket and a respective one of the suspension assembly hangers...*" It is the Examiner's position that a bracket and a suspension hanger are not part of the same art recognized class. The second Markush group includes (in lines 13,14) "*said bracket being secured to at least one*

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structure selected from the group consisting of a respective one of the main members and a respective one of the hangers" It is the Examiner's position that a suspension hanger and a main member are not part of the same art recognized class. The second reason that the claim is unclear is because it appears to include an imbedded Markush grouping, and as such it is unclear if the scope must include the hangers being secured to a respective one of the main members, and if there must be a bracket. Claim 15 is problematic because it recites " *each one of said end caps being secured to at least one structure selected from the group consisting of said main members and the suspension assembly hangers, for forming part of the structure of the frame...*" Claim 20 recites "*each one of said brackets being secured to at least one structure selected from the group consisting of said main members and the suspension assembly hangers, for forming part of the structure of the frame*". As previously discussed, it is the Examiner's position that a suspension hanger and a main member are not part of the same art recognized class. Additionally, claim 20 is problematic because the use of the alternative formulation is confusing, because the only embodiment disclosed that includes the bracket sealing the vessel, as required in claim 20, includes the attachment of the bracket to both the main member and the hanger (see Figure 6 of the instant application.)

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9, and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Mertz (EP 1 245 476 A1.) Mertz, (Figures 1, 6, and 7) teaches a vehicle having a front and rear end and having at least one component requiring compressed air (air brakes, see para 0066) Also taught is a generally cylindrically shaped 31 vessel sealed by endcaps (71,72 see Figure 6) and secured at each of the two endcaps (as broadly recited) and with respect to claim 15, to a structure that is a vehicle hanger (36) and a main frame longitudinal main member (11,12) The hanger is secured to the main frame of the vehicle (at 38A) The cross beam of Mertz inherently reacts loads imposed on the frame and the vehicle. Regarding claims 5 and 7, Mertz teaches brackets (35, 38A or integral bracket 35, 38D) that are secured to the main members and the suspension assembly hangers. Regarding claim 6, each of the end caps is secured to a vehicle hanger (via the vessel and the bracket 38) Regarding claim 9, each of the vessel ends is open (see Figure 6.) Regarding claim 17, as broadly recited, each endcap is secured to the hangers and the main members (via the bracket 35, 38.) Regarding claims 8 and 18, Mertz teaches that a plurality of the modules (3) are included, (see Figure 1) and since each module includes a vessel, there are a plurality of vessels. Since the vessel is fixed to the vehicle frame, it inherently reacts loads.

Claim Rejections - 35 USC § 103

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6, 8, 10, 12, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeanson (FR 2678867 A1) in view of Applicant's admitted prior art (AAPA.) Jeanson teaches a vehicle having a front and rear end (inherently) and having at least one vehicle component requiring compressed air (suspension and brakes, see attached English language abstract.) Also taught is a generally cylindrically shaped vessel sealed by an endcap 17) at each of two ends and secured at each of the two endcaps to a structure that is a vehicle hanger (23.) The hanger is secured to the main frame (6) of the vehicle (at 24.) The details of the main frame are not shown, and as such Jeanson does not specifically teach that the main frame includes two parallel spaced apart main frame members. The Applicant admits, as is well known, that frames typically include spaced apart longitudinally extending main members (see p 4, 2nd full paragraph.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to include longitudinally extending frame members with the vehicle of Jeanson, since such a design is typical, as taught by the Applicant, in order to support the weight of the vehicle. The cross beam of Jeanson inherently reacts loads imposed on the frame and the vehicle. Regarding claim 10, the suspension includes a suspension assembly beam (4) with a first end mounted on the hanger (at 20) and a

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second end attached to an air spring (7) which is mounted on the main member.

Regarding claim 15, as broadly claimed, and as disclosed, endcap is term that is reasonably seen to include an integral endcap (similar to the one disclosed by the applicant in figure 5) and as such each one of the endcaps of Jeanson can reasonably said to be secured to the hanger. Regarding claim 17, as broadly recited, each endcap is secured to the hangers and the main members (via the hangers.) Regarding claims 8 and 18, vehicles such as the one disclosed by Jeanson are well known to include a plurality of wheel axles, because these types of axles are generally for heavy trucks, which require a plurality of wheel axles to distribute the load. It would have been obvious to one having ordinary skill in the art at the time of the invention to include a plurality of axles, in order to distribute the load. In providing a plurality of axles, the plurality of vessels would be included. Additionally, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

7. Claims 10-14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mertz (EP 1 245 476 A1) in view of Applicant's admitted prior art (AAPA) or Jeanson (FR 2678867 A1.) Mertz is discussed above, and only shows the suspension assembly (3) schematically, and as such fails to teach the suspension assembly beam mounted on the hanger and including an air spring which is mounted on the beam and the main members. Applicant admits that such an air spring suspension is well known (see page 5, line 5 of the instant application. Jeanson additionally teaches such a suspension. These suspensions are useful because they are able to suspend heavy

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axles, and additionally can change the height of the vehicle to compensate for load differences. It would have been obvious to one having ordinary skill in the art at the time of the invention to use a well known air spring suspension, of the type admitted by Applicant to be well known, and shown by Jeanson to be well known, in order to provide a suspension that is useful for heavy axles, and can compensate for load differences. Regarding claim 11, the vessel of Mertz in view of AAPA or Jeanson is attached to the brackets adjacent to the air spring in the lengthwise direction, because the hangers can fairly be said to be adjacent the air springs, in a lengthwise direction. Regarding claim 13, the location of the tank intermediate the air spring and the hangers would have been obvious to one having ordinary skill in the art because such a location would require less auxiliary piping, and hence be cheaper. Additionally, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

8. Claims 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mertz (EP 1 245 476 A1) in view of Richardson (US 6,398,236 B1.) Mertz is discussed above, and teaches all elements of the claimed invention except that Metz teaches separate end caps (71, 72, see Figure 6) and does not teach that the bracket (35) seals the ends of the vessel. Richardson teaches that it is known to use the bracket (44) to both seal the ends of the vessel (30) and attach the vessel to the suspension (32.) This arrangement saves material because it does not require two plates that perform the same function. Based on the teaching of Richardson, it would have been obvious to one

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having ordinary skill in the art at the time of the invention to modify the vessel of Mertz to use the brackets (34, 35) as the endcaps, and hence save materials.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mertz (EP 1 245 476 A1) in view of Richardson (US 6,398,236 B1) as applied to claim 23 above, and further in view of Applicant's admitted prior art (AAPA) or Jeanson (FR 2678867 A1.) Mertz is discussed above, and only shows the suspension assembly (3) schematically, and as such fails to teach the suspension assembly beam mounted on the hanger and including an air spring which is mounted on the beam and the main members. Applicant admits that such an air spring suspension is well known (see page 5, line 5 of the instant application. Jeanson additionally teaches such a suspension. These suspensions are useful because they are able to suspend heavy axles, and additionally can change the height of the vehicle to compensate for load differences. It would have been obvious to one having ordinary skill in the art at the time of the invention to use a well known air spring suspension, of the type admitted by Applicant to be well known, and shown by Jeanson to be well known, in order to provide a suspension that is useful for heavy axles, and can compensate for load differences.

Response to Arguments

10. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

11. The indicated allowability of previous claim 9 is withdrawn in view of the newly discovered reference(s) to Mertz and Jeanson. It is noted that while the Applicant has

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indicated that claim 15 "stems" from rewritten claim 9, it does not include all the limitations of claim 9. It appears that new claim 24 is the closest in scope to old claim 9.


12. The Examiner disagrees with the Applicant's assertion that the Applicant was the first to recognize the advantage of utilizing an air vessel as a vehicle cross member, in combination with brackets and hangers. Please see the rejections above for discussion of Mertz and Jeanson.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth Ilan whose telephone number is 571-272-6673. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth Ilan
Primary Examiner
Art Unit 3616



2/6/06